# Amendments to the claims:

## 1-13. (Cancelled)

14. (Currently Amended) A position input device comprising:

an oscillator that generates an oscillating injection signal for direct electrical connection coupling to a first body part of a human body;

a first input operable to receive a first position signal from a first position sensing electrode that provides a first signal indicative of senses a distance of the first position sensing electrode from a second body part in a noncontacting manner;

a second input operable to receive a second position signal from a second position sensing electrode that provides a second signal indicative of senses a distance of the second position sensing electrode from the second body part in a non-contacting manner, the first and second position sensing electrodes being spaced from each other;

a differential amplifier having first and second differential inputs connected to the first and second inputs to receive the first and second <u>position</u> signals;

a processing device connected to the differential amplifier and operable to generate a distance signal in a first direction based on evaluation of the first and second signals an output of the differential amplifier.

- 15. (Previously Presented) The position input device according to claim 14, wherein the distance signal is received by a computer to control a cursor on a display.
- 16. (Previously Presented) The position input device according to claim 14, wherein the processing device includes an analog-to-digital converter (ADC) connected to

the differential amplifier and a processor connected to the output of the ADC.

### 17 - 19. (Cancelled)

20. (Currently Amended) An input device for controlling the position of a cursor on a display of a computer, the input device comprising:

an oscillator that generates an oscillating signal;

- a signal injection electrode connected to the oscillator and operable to directly connect to a body part of an operator establish an electric field about a movable body part of an operator;
- at least one first position-sensing electrode positioned near a fixed reference frame defining an imaginary input boundary, for sensing the strength of a field established about a movable body part of the operator the electric field in a non-contacting manner and thereby to provide a first control variable corresponding to the position of the movable body part in the reference frame in a first direction:
- at least one second position-sensing electrode positioned near the fixed reference frame and spaced from the at least one first position-sensing electrode, for sensing the strength of the <u>electric</u> field <del>about the mevable bedy part</del> in a non-contacting manner and thereby to provide a second control variable corresponding to the position of the <u>movable</u> body part in the reference frame in a-second <u>the first</u> direction; and
- a differential amplifier having first and second differential inputs connected to the at least one first and second position-sensing electrodes; and
  - a control circuit connected to the differential

amplifier and operative in response to the first and second control variables to position the cursor on the display sereen in accordance with the position of the movable body part in an active region defined by the reference frame;

the cursor being positioned in response to the first and second control variables by movement of the body part in the active region.

#### 21. (Cancelled)

- 22. (Previously Presented) The input device according to claim 20, further comprising a keyboard for entry of data and wherein the body part is one of the hands of the operator, and wherein the position-sensing electrodes are so arranged with respect to the keyboard that the operator can control the position of the cursor by moving the one hand in a hovering manner over the keyboard.
- 23. (Previously Presented) The input device according to claim 22, wherein the injection electrode is arranged to inject the electrical signal into the body of the operator via the other hand of the operator.
- 24. (Previously Presented) The input device according to claim 22, further comprising one or more click switches for operation by the operator.
- 25. (Previously Presented) The input device according to claim 24, wherein the click switch or switches are arranged to be operated by the other hand of the operator.
- 26. (Previously Presented) The input device according to claim 20, further comprising a pointing device and a selection device for enabling the operator to select either the pointing device or the input device for controlling the position of the cursor on the display.

- 27. (New) A position input device comprising:
  - an oscillator that generates an oscillating signal;
- a signal injection electrode connected to the oscillator and operable to establish an electric field about a movable body part of an operator;
- a first input operable to receive a first position signal from a first position sensing electrode that senses a position of the first position sensing electrode from the movable body part in a non-contacting manner;
- a second input operable to receive a second position signal from a second position sensing electrode that senses a position of the second position sensing electrode from the movable body part in a non-contacting manner, the first and second position sensing electrodes being spaced from each other, and
- a differential amplifier having first and second differential inputs respectively connected to the first and second inputs to receive the first and second position signals and to take the difference between the first and second position signals, wherein the output of the differential amplifier represents a position of the movable body part in a first direction.
- 28. (New) The position input device according to claim 27, further comprising a bandpass filter connected to the differential amplifier and having a center frequency corresponding to the frequency of the oscillator.
- 29. (New) The position input device according to claim 27, further comprising a synchronous detector connected to the differential amplifier.
- 30. (New) The position input device according to claim 27,

# further comprising:

- a bandpass filter connected to the differential amplifier and having a center frequency corresponding to the frequency of the oscillator; and
- a synchronous detector connected to the differential amplifier.
- 31. (New) The position input device according to claim 30, further comprising first and second high gain buffer amplifiers connected between the first and second inputs and the differential amplifier.
- 32. (New) The position input device according to claim 27, wherein the signal injection electrode is coupled to one hand of the operator and the electric field is established about the other hand of the operator.